

Supplement prepared by Xenia Leontyeva to the article

Gender (im)balance in the Russian cinema: on the screen and behind the camera

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Detailed description of the variables

The database we use was collected by Xenia Leontyeva while working at Nevafilm Research (until 2018) and later. In terms of distribution data it is based on such sources as open base Russian Cinema Fund Analytics – RCFA (since 2015) (*Russian Cinema Fund Analytics – Единая Федеральная Автоматизированная Информационная Система Сведений о Показах Фильмов в Кинозалах*) and closed base comScore/Rentrak (‘International Box Office Essential’) serving major Hollywood studios (data from it has been used since 2008 to fill gaps in open databases), Bookers’ Bulletin (since 2011) (*Бюллетень Кинопрокатчика*) and Russian Film Business Today magazines (since 2004) (*Кинобизнес Сегодня*), as well as self-collected by Nevafilm Research (*Невафильм Research*) employees from film distributors and producers; the rights to use and continue this dataset has been received from Nevafilm company. In terms of production data the information was taken from the State register of film distribution certificates (*Реестр Прокатных Удостоверений Фильмов*), Kinopoisk.ru (*КиноПоиск*), and from the films credits.

Following the European Audiovisual Observatory, we use the number of cinema tickets sold (**Attendance**) as a main dependent variable, despite numerous researchers prefer box office receipts. We do this for several reasons. The first reason for this choice is that the number of viewers is not subject to inflation. Secondly, our data covers statistics on the CIS countries (including Russia, Kazakhstan, Belarus, and a number of other countries with Russian-language film distribution¹ coordinated from Moscow) with different currencies. The admissions number is a universal measurement for all of these markets.

It worth noting that the database used for analysis covers a wider area than just the films that were released in Russian cinemas creating some anomalies. The dataset also has distortions caused by the accumulation of various sources of statistics from which the “best” figures are selected – the ones for which the data on the box office of the film is greater. On the other hand, this is the only available dataset on the market which is widely recognized as reliable for decision making by the commercial companies and public bodies.

The following variables in some models are dependent, in others – independent or even control: female representation parameters, films budgets, distributor types reflecting their strength.

¹This mode of statistics collection was introduced by the Russian Film Business Today (*Кинобизнес Сегодня*) magazine in early 2000th when it was the only source of data available. The reason is that Russian distributors often acquire the rights to the enlarged territory (not only the Russian Federation) where they operate directly from Russia or through local sub-distributors; they did not separate Russian data nor in their own reports, neither in the weekly surveys answers they sent to the industrial magazines up to 2015 when the RCFA automatic system for the Russian cinemas was introduced.

Female representation on the screen is measured in the research with three parameters: results of the Bechdel-Wallace test modified by Leontyeva (BWL) for the film and the network measurements suggested by (Kagan et al.) – gender degree ratio, calculated for two kinds of network (based on dialogues and on all characters communications).

The variable **BWL** measures the absence or presence of non-stereotypical dialogues between the film heroines. I use a modified version of test results which gives richer numeric data instead of a classical binary (pass/fail – see (Lindner et al.)) or a four-digit option (how many points out of 3 required by the test are scored: 0/3, 1/3, 2/3 or 3/3 as in (Agarwal et al.) or (*Bechdel Test Movie List*)). Instead, the BWL measures in proportion of dialogues between female characters on qualified topics within the total number of the film dialogues.

$$BWL = \frac{\text{Number of dialogues among female characters on qualified topics}}{\text{Total number of the film dialogues}} \quad (1)$$

Disqualified topics are not only about any man, but also women, appearance, fashion, attractiveness in general, as well as children and household chores – in this way, a circle of stereotypical themes usually associated with women was outlined (a similar variation of testing is found, for example, in (Kapoor et al.)). Mixed conversations, in which both disqualified and abstract topics are mentioned, are included in the analysis. Only characters who participate in more than one scene (or, if determined by the coder, one *important* scene) and have at least one line are marked-up. Monologues are excluded. A total of 243 Russian films were analyzed (including two Hollywood blockbusters created with the participation of Russian producers: “Machete Kills” (2013) and “Mission: Impossible: Ghost Protocol” (2011)).

The data was collected during the research practice of students at the St. Petersburg State Institute of Film and Television, as well as a project of the Higher School of Economics under my supervision in 2019-2021. 95 coders took part in the project, namely:

Name	University	Number of films
1. Alena Apanasevich	National Research University Higher School of Economics	6
2. Galina Babakokhian	National Research University Higher School of Economics	6
3. Daria Galavanova	National Research University Higher School of Economics	6
4. Kseniia Gorochnaia	National Research University Higher School of Economics	6
5. Alexandra Ihilova	National Research University Higher School of Economics	6
6. Alexandra Kormiltceva	National Research University Higher School of Economics	6
7. Alexandra Korovina	National Research University Higher School of Economics	6

Name	University	Number of films
8. Anastasiia Leontyeva	National Research University Higher School of Economics	6
9. Alice Makarenko	National Research University Higher School of Economics	6
10. Paulina Mezhakova	National Research University Higher School of Economics	6
11. Sofia Pak	National Research University Higher School of Economics	6
12. Anastasiia Russu	National Research University Higher School of Economics	6
13. Alina Sablina	National Research University Higher School of Economics	6
14. Alua Ualieva	National Research University Higher School of Economics	6
15. Anna Ulanskaia	National Research University Higher School of Economics	6
16. Evgenii Aminov	St. Petersburg State Institute of Film and Television	3
17. Larisa Glebova	St. Petersburg State Institute of Film and Television	3
18. Alena Godareva	St. Petersburg State Institute of Film and Television	3
19. Alexandra Zhohova	St. Petersburg State Institute of Film and Television	3
20. Kirill Kolmakov	St. Petersburg State Institute of Film and Television	3
21. Denis Merenkov	St. Petersburg State Institute of Film and Television	3
22. Vladimir Molodtsov	St. Petersburg State Institute of Film and Television	3
23. Yaroslav Nazarenko	St. Petersburg State Institute of Film and Television	3
24. Iraida Chudova	St. Petersburg State Institute of Film and Television	3
25. Ruslan Amanzhulov	St. Petersburg State Institute of Film and Television	2
26. Oleg Antonov	St. Petersburg State Institute of Film and Television	2
27. Olga Bazarnova	St. Petersburg State Institute of Film and Television	2
28. Kseniia Bogatskaia	St. Petersburg State Institute of Film and Television	2
29. Daniil Britvin	St. Petersburg State Institute of Film and Television	2
30. Lev Vodianin	St. Petersburg State Institute of Film and Television	2

Name	University	Number of films
31. Paulina Glebova	St. Petersburg State Institute of Film and Television	2
32. Margarita Godovikova	St. Petersburg State Institute of Film and Television	2
33. Karina Golovina	St. Petersburg State Institute of Film and Television	2
34. Maria Grigoreva	St. Petersburg State Institute of Film and Television	2
35. Victoria Dunaeva	St. Petersburg State Institute of Film and Television	2
36. Anastasiia Emeliantceva	St. Petersburg State Institute of Film and Television	2
37. Ekaterina Ermakova	St. Petersburg State Institute of Film and Television	2
38. Dmitrii Zherbin	St. Petersburg State Institute of Film and Television	2
39. Anastasiia Zarskaia	St. Petersburg State Institute of Film and Television	2
40. Anna Ivanova	St. Petersburg State Institute of Film and Television	2
41. Daria Ionova	St. Petersburg State Institute of Film and Television	2
42. Uliana Climova	St. Petersburg State Institute of Film and Television	2
43. Vladimir Kondrashov	St. Petersburg State Institute of Film and Television	2
44. Ekaterina Koreshkova	St. Petersburg State Institute of Film and Television	2
45. Anastasiia Kravtsova	St. Petersburg State Institute of Film and Television	2
46. Diana Krikunova	St. Petersburg State Institute of Film and Television	2
47. Sofia Kudriavtceva	St. Petersburg State Institute of Film and Television	2
48. Maximilian Kuznetsov	St. Petersburg State Institute of Film and Television	2
49. Egor Leonidov	St. Petersburg State Institute of Film and Television	2
50. Olga Maksimova	St. Petersburg State Institute of Film and Television	2
51. Elizabeth Manko	St. Petersburg State Institute of Film and Television	2
52. Irina Nausenko	St. Petersburg State Institute of Film and Television	2
53. Alice Neilenko	St. Petersburg State Institute of Film and Television	2

Name	University	Number of films
54. Diana Nikulina	St. Petersburg State Institute of Film and Television	2
55. Iuliia Novikova	St. Petersburg State Institute of Film and Television	2
56. Liubov Ovsianikova	St. Petersburg State Institute of Film and Television	2
57. Arina Orlova	St. Petersburg State Institute of Film and Television	2
58. Alexander Pavlov	St. Petersburg State Institute of Film and Television	2
59. Nikita Pavlutskii	St. Petersburg State Institute of Film and Television	2
60. Ekaterina Pashkova	St. Petersburg State Institute of Film and Television	2
61. Alik Peroshkier	St. Petersburg State Institute of Film and Television	2
62. Daniil Podkaura	St. Petersburg State Institute of Film and Television	2
63. Anastasiia Potanina	St. Petersburg State Institute of Film and Television	2
64. Alexandera Rachkovskaia	St. Petersburg State Institute of Film and Television	2
65. Valeriia Rybushkina	St. Petersburg State Institute of Film and Television	2
66. Sergey Riazantsev	St. Petersburg State Institute of Film and Television	2
67. Anastasiia Svitchenko	St. Petersburg State Institute of Film and Television	2
68. Aleksei Severiuhin	St. Petersburg State Institute of Film and Television	2
69. Paulina Semenova	St. Petersburg State Institute of Film and Television	2
70. Igor Semiashkin	St. Petersburg State Institute of Film and Television	2
71. Marianne Serebrianaia	St. Petersburg State Institute of Film and Television	2
72. Valentin Sidullin	St. Petersburg State Institute of Film and Television	2
73. Anna Sinitcyna	St. Petersburg State Institute of Film and Television	2
74. Anna Stoliarova	St. Petersburg State Institute of Film and Television	2
75. Tanchulpan Sufianova	St. Petersburg State Institute of Film and Television	2
76. Anastasiia Tupikina	St. Petersburg State Institute of Film and Television	2

Name	University	Number of films
77. Elina Uralskaia	St. Petersburg State Institute of Film and Television	2
78. Anastasiia Fadeeva	St. Petersburg State Institute of Film and Television	2
79. Stepan Fomin	St. Petersburg State Institute of Film and Television	2
80. Andrei Khomiakov	St. Petersburg State Institute of Film and Television	2
81. Sergey Chaika	St. Petersburg State Institute of Film and Television	2
82. Igor Shevnin	St. Petersburg State Institute of Film and Television	2
83. Anna Iurist	St. Petersburg State Institute of Film and Television	2
84. Martha Iakovleva	St. Petersburg State Institute of Film and Television	2
85. Alexandra Iakubovskaia	St. Petersburg State Institute of Film and Television	2
86. Natalia Gonchar	St. Petersburg State Institute of Film and Television	1
87. Anna Korovinskaia	St. Petersburg State Institute of Film and Television	1
88. Alexandra Kuzmenko	St. Petersburg State Institute of Film and Television	1
89. Anastasiia Nodzhak	St. Petersburg State Institute of Film and Television	1
90. Alexandra Rudakova	St. Petersburg State Institute of Film and Television	1
91. Diana Safronova	St. Petersburg State Institute of Film and Television	1
92. Valeriia Tarasova	St. Petersburg State Institute of Film and Television	1
93. Natalia Fedorova	St. Petersburg State Institute of Film and Television	1
94. Zlata Cheremnykh	St. Petersburg State Institute of Film and Television	1
95. Xenia Leontyeva	Author and project supervisor	1

On watching a film for the first time, students made the list of characters with their binary gender (based on the actor's gender) and the list of scenes (each scene should be limited by three classical factors: place, time and action (i.e. the number of participants)². During repeated watching the students marked-up the contingency

² It should be mentioned that scenes number could differ among coders despite the given instruction: there were six films tested twice (for further analysis the variants with bigger scenes number and better BWL score were taken). The scenes number in the twice coded sample has maximum variation 31%, but it does not affect much the BWL test score.

table with all the scenes and characters using a binary coding system in four categories (digits):

- (1) First digit: the character is present in the scene (1 – yes);
- (2) Second digit: in the given scene, the character communicates with others on a non-disqualified topic (1 – yes; 0 – no);
- (3) Third digit: in the given scene, the character communicates with others about men and women, appearance, fashion, attractiveness in general (1 – yes; 0 – no);
- (4) Fourth digit: in the given scene, the character communicates with others about children and household chores (1 – yes; 0 – no).

If all topics were touched in the same dialogue, the second, third and fourth digits were coded as 1. If the character was speechless, his code consisted only of one digit (1). If the character did not participate in the scene, the cell was left blank. The matrix was used as the input data to calculate the BWL score. The disqualified topics were the ones coded as 1010, 1001 and 1011.

Having the contingency matrix of each film two network parameters were calculated with the help of formula (2):

$$\text{Gender degree ratio} = \frac{\text{Total degree female}}{\text{Total degree male}} \quad (2)$$

Gender degree ratio (**GDR**) of a film is calculated from the bimodal network of characters and dialogues in which they participate throughout the entire movie. For this purpose, a unimodal weighted projection of this network is constructed where the vertices are characters only, and the arcs between each pair of vertices represent the number of dialogues in which both characters in the pair have participated. Once, based on this data, the weighted centrality for each character is obtained, the sum of centralities of all female characters is divided by the respective sum for males. Gender degree ratio total (**GDRT**) differs from GDR with the input data only: instead of dialogues, all scenes are used, including those where a given character is participating silently. Unlike BW test which aims to assess stereotyping of women, these network measures evaluate women's overall importance in a film, as compared to men. Network indexes deprived of the subjective point (the decision on what women talk about) still may have distortions caused by variability of the scene framework definition.

Budget amount (**BudgetALL** code in the modeling) is measured in rubles, discounted as of the end of December 2019 based on the consumer price index (CPI) in the Russian Federation (*Инфляционные Калькуляторы*). It is not available for all films and is taken from websites Kinopoisk (*КиноПоиск*) or RCFA (*Russian Cinema Fund Analytics – Единая Федеральная Автоматизированная Информационная Система Сведений о Показах Фильмов в Кинозалах*) (available since 2015 on State support page). To measure female access to the resources we used the amount of the state financial support for the film (**StateSup**; it is taken from the RCFA website and discounted as of the end of December 2019).

The power of the distribution company, which is its capability to book film widely is introduced into the models via a proxy parameter – company type

(DistrType). This is a factor variable encoded numerically from four to one:

4. representatives of Hollywood major studios – the strongest market players. In total, five representatives of the majors collected about 80% of the yearly box office receipts;
3. representatives of Russian leading producers which have been selected by the Cinema Fund since 2010 and received significant amounts of state subsidies. Among these producers there is a pool of companies regularly receiving this status, some of which had their own distribution companies or permanent partners, while others used to establish cooperation with representatives of majors;
2. independent distributors which acquire the rights to films on cinema markets independently and bear full responsibility for their choice;
1. self-distributors – producers who release their films without the mediation of a distribution company and are the weakest market players. (Леонтьева)

The classification of film distributors in the database was made on an annual basis considering the position of each company on the market in each period.

The third group of variables in all models is considered only as independent: binary gender composition of the key crew members and a threshold when the shift in attention towards female directors in Russia is observed.

As key crew members I consider three professions: producers, screenwriters, and directors. Variables are calculated in terms of the proportion of males among all people in the position: **DirMaleShare**, **ProdMaleShare**, **ScrMaleShare**; the aggregated variable **maleshare** is an accumulated proportion of men in all three positions together. The binary sex (male or female) is appointed based on the person's name, collected from the State register of film distribution certificates (*Реестр Прокатных Удостоверений Фильмов*), RCFA (*Russian Cinema Fund Analytics – Единая Федеральная Автоматизированная Информационная Система Сведений о Показах Фильмов в Кинозалах*) and Kinopoisk (*КиноПоиск*), as well as from movie credits. Sex was determined by a list of male and female first names (the classification started from the website (*Сайт-Энциклопедия Личных Имен «Имя»*) and gradually the name list was enlarged manually), and by the endings of the surnames (the following algorithm was used: the endings of surnames with “а” or “я” are assigned to the female gender, those with “ов”, “ин”, “й” are assigned to the male). In controversial cases (when the definition by name and surname did not match or was not determined by any of the methods), the verification was carried out based on persons' photo or texts about them found on the Internet. This sex attribution method does not reflect self-identification of individuals described in the research.

The year 2015 was chosen as a **threshold** due to the perceptible shift in attention to the gender of filmmakers (primarily directors) in the Russian film industry. In this year, a special out-of-competition program appeared within the framework of the Moscow International Film Festival: in the very beginning it was held under the name “Women's Explosion” (Альперина), in 2016-2020 – “Women's Time” (Артюх, ‘Время женщин: визуальный феминизм на ММКФ-2020’), and in 2021 – “Female filmmakers of our time” (*Кинорежиссерки Нашего Времени. 43-й Московский Международный Кинофестиваль*). Though the curator of this program, Angelica Artyukh, notes that Russian film critics started talking about a

“female shift” in Russian cinema as early as 2007, when such directors as Anna Melikyan, Vera Storozheva, Larisa Sadilova, Marina Lyubakova, Angelina Nikonova, Maria Sahakyan become famous; it was only since 2015 that women's films began to win awards at the most prestigious film festival of Russian cinema “Kinotavr”. Movies such as “Pro ljubov / About Love” by Anna Melikyan (2015), “Khoroshiy malchik / Good Boy” by Oksana Karas (2016), “Serdtse mira / Core of the World” by Natalia Meshchaninova (2018) and “Davaj razvedemsy / Let's get divorced” by Anna Parmas (2019) received prizes of various significance (Артюх, *Кинорежиссерки в современном мире*).

Films characteristic classification before and after the threshold is based on the first release of the film in the CIS.

The variables left are control: film genre, age rating, number of screens in the country, number of vacation days and the competitors on the release week, film type (in the sample for the gender representation analysis). Their choice is based on the author cinema market analysis experience, as well as on the previous box office receipts investigations, e. g. in 1983 Barry Litman singled out such factors as age rating, genres, stars, critics reviews and nominations, distribution company booking style and release date (Litman).

Genre is considered by many scholars (e. g. (Litman); (Gunter); (Bagella and Becchetti) as a significant variable for predicting its success At the same time it is rather controversial characteristic of a film since there are numerous variations of genre classification proposed by the researchers. Though semantic genre associations help viewers navigate by telling them what characters, plot, and aesthetic patterns to expect from a film, it is not usually consistent or even homogeneous. For example, Hennig-Thurau and Houston (Hennig-Thurau and Houston) consider 13 genre characteristics based on the <https://www.imdb.com/lists> (‘International Movie Database’) and distinguish among them not only plot characteristics of the films (such as comedy or drama), but also the target audience age (children), and the production technology (documentary and animation).

(Hider et al.) in attempt to find patterns in the formation of genre characteristics in various sources analyzed seven genre dictionaries created for different purposes. They concluded it was not possible to universalize film genres, though some stable categories were found (such as comedy and horror). Genre dictionary is influenced by the classification goals and the collection content. According to the authors, the convergence is facilitated by the frequency of the definitions use in the research discourse.

Alexander and Elena Prokhorov (Prokhorov and Prokhorova) studied the genres of late Soviet cinema which is close to our research context. They differed business and film critics approaches to the genre category. The first originated from the Hollywood tradition of signaling to the audience on the film content. While the film studies genre analysis ascended to the auteur cinema investigation in the 1960th and nested in the time and space context. Therefore, for the Soviet film history they singled out such genres as the films of prestige, police investigation, socialist comedy, and melodrama, considered the latter as the most important genre of late USSR and of post-Soviet cinema.

Thus, the genre characteristic of the film has a teleological nature. When considering the genre as a factor of the film success, it makes sense to focus on the

is reflected in the distribution certificate (*Реестр Прокатных Удостоверений Фильмов*). In 2012 the ratings were reformed: 14+ disappeared and 6+ appeared, that is why four groups of ratings were created covering the period of 2008-2019: 0/6+, 12+, 14/16+ and 18 +.

To consider season, we introduce control variables related to the specific situation of each film release week by factoring when people are prone to go to the cinema and when the distributors usually prefer to concentrate their releases. The first variable is the number of days off (**VacDays**) which is determined according to the Russian production calendar (see, for example, (*Производственный Календарь На 2005 Год*)). And the second is the number of films that started at the same time (**Competitors**).

The Russian cinema market (as the biggest among CIS countries) has been fast growing, with a significant increase in the number of screens through the period under investigation. We calculated the average number at of the beginning and the end of the month when the film was released, and introduced this into the models (**ScrRU**). This was done to compensate for the lack of information of the screens number booked for every film screening.

The final control variable (**type**) is a factor and appears from the sample formation of the Bechdel-Wallace test analysis. It should include the 10 most popular Russian films at the box office per year (**top**), the average films in terms of popularity (**average**) – those that were visited by 200 to 400 thousand people⁴, and aimed at festival distribution (**festival**) (awarded by Cannes, Berlin or Kinotavr film festivals, as well as the Nika, Golden Eagle or Oscar awards); some of the films do not belong to any of the groups (**undefined**), since tests on them were carried out at the beginning of 2019 before these criteria were determined.

Speaking of the variables it is worth mentioning that some factors related to the cinema attendance and recommended by other researchers were not introduced into the models. For example, as noted above, statistics on the Russian and CIS market do not contain the number of screens booked to show the film. The seasonality of the Russian distribution was not taken into account because it differs significantly from the US; moreover, it is changing over the time. The absence of these factors was tackled by introducing proxy variables into the models: average number of screens in Russia, number of vacant days and competing films on the week of release. Nevertheless, this compensation cannot be considered strictly equivalent.

Finally, the star profiles of actors and critics' ratings are also omitted: in the first case we not only do not have data about them in the dataset, but we leaned upon consensus that Russian actors did not have the same power to attract audience as their foreign colleagues ('Кому Нужны Кинозвезды?'). Similar observations apply to the limited influence of film critics (Патрауз, М.), moreover, some authors consider critics reaction not as predictor (independent variable) but as film success indicator (dependent variable) (Lindner and Schulting).

⁴ The average admissions number was calculated for 1061 films made with Russian participation, for which there is data on attendance, amounted to 364 thousand; the median value is 25 thousand, the first quartile is 2.6 thousand, the third quartile – 307 thousand, the maximum – about 12 million.

- Альперина, Сусанна. 'Еще Раз 12 От Никиты Михалкова'. *Российская Газета* №121 (6692), 4 June 2015, <https://rg.ru/2015/06/04/mmkf.html>.
- Артюх, Анжелика. 'Время женщин: визуальный феминизм на ММКФ-2020'. *Искусство кино*, 28 Sept. 2020, [https://kinoart.ru/texts/vremya-zhenschin-vizualnuu-feminizm-na-mmkf-2020](https://kinoart.ru/texts/vremya-zhenshin-vizualnuu-feminizm-na-mmkf-2020).
- . *Кинорежиссерки в современном мире*. Новое Литературное Обозрение, 2021. *Бюллетень Кинопрокатчика*. <https://www.kinometro.ru/>.
- Инфляционные Калькуляторы*. <https://уровень-инфляции.рф/инфляционные-калькуляторы>. Accessed 30 Apr. 2022.
- Кинобизнес Сегодня*. <https://kinobusiness.com/>.
- КиноПоиск*. <https://www.kinopoisk.ru/>.
- Кинорежиссерки Нашего Времени*. 43-й Московский Международный Кинофестиваль. <http://festivalfilm.ru/kinorezhissorki-nashego-vremeni-43-j-moskovskij-mezhdunarodnyj-kinofestival/>. Accessed 22 May 2022.
- 'Кому Нужны Кинозвезды?' *Colta.Ru*, 21 Oct. 2013, <https://www.colta.ru/articles/cinema/874-komu-nuzhny-kinozvezdy>.
- Леонтьева, Ксения. *Основы Управления Дистрибьюторской и Кинотеатральной Деятельностью. Учебное Пособие*. СПбГИКиТ, 2020, http://books.gukit.ru/pdf//2020/Uchebnaja%20literatura/04_Leonteva_Osnovy_upravlenija_distrib_i_kinoteatr_dejat_UP_2020.pdf.
- Невафильм Research*. <https://www.research.nevafilm.ru/research/statistika/>.
- Производственный Календарь На 2005 Год*. http://www.consultant.ru/document/cons_doc_LAW_51105/7fa12e623ec22075fb6f85280b26f465f02d1a87/. Accessed 5 Sept. 2021.
- Ратгауз, М. 'Кому Еще Нужна Кинокритика?' *Журнал «Сеанс»*, 2012, <https://seance.ru/articles/film-critics/>.
- Реестр Прокатных Удостоверений Фильмов*. https://opendata.mkrf.ru/opendata/7705851331-register_movies.
- Сайт-Энциклопедия Личных Имен «Имя»*. 2019, <https://imya.com>.